

# Intercession City Title V Permit Summary

## Emission Limits:

### Peaking Combustion Turbine # 1 - 6 Emission Limits

| Pollutant       | Emission Limit<br>(No.2 Fuel Oil) |
|-----------------|-----------------------------------|
| SO <sub>2</sub> | 0.5% Sulfur Content, by weight    |
| VE              | 20% Opacity                       |

### Combustion Turbine # 7 - 10 Emission Limits

| Pollutant          | Emission Limit<br>(Natural Gas)                                    | Emission Limit<br>(No.2 Fuel Oil)                                  |
|--------------------|--|--|
| SO <sub>2</sub>    | 1 grain/100 dscf   | 0.2% Sulfur Content, by weight                                     |
| NO <sub>x</sub>    | 25 ppmvd<br>(24-hour average)                                      | 42 ppmvd<br>(24-hour average)                                      |
| Particulate Matter | -<br>(7.50 lb/hr/unit)   | 0.01 lb/MMBtu<br>(15.00 lb/hr/unit)                                |
| VOC                | 3 lb/hr/unit   | 5 lb/hr/unit   |
| Carbon Monoxide    | 21.30 lb/hr/unit   | 23 ppmvd<br>(54 lb/hr/unit)  |
| VE                 | 10% Opacity at Full Load<br>(20% opacity @ exceptional conditions) | 10% Opacity at Full Load<br>(20% opacity @ exceptional conditions) |

### Combustion Turbine #11 Emission Limits

| Pollutant          | Emission Limit<br>(Natural Gas)                                    | Emission Limit<br>(No.2 Fuel Oil)                                  |
|--------------------|--|--|
| SO <sub>2</sub>    | 1 grain/100 dscf   | 0.2% Sulfur Content, by weight                                     |
| NO <sub>x</sub>    | 25 ppmvd<br>(24-hour average)                                      | 42 ppmvd<br>(24-hour average)                                      |
| Particulate Matter | -<br>(7.50 lb/hr/unit)   | 0.01 lb/MMBtu<br>(17.00 lb/hr/unit)                                |
| VOC                | 5.30 lb/hr/unit  | 9.00 lb/hr/unit  |
| Carbon Monoxide    | 30.90 lb/hr/unit   | 25 ppmvd<br>(79.00 lb/hr/unit)                                     |
| VE                 | 10% Opacity at Full Load<br>(20% opacity @ exceptional conditions) | 10% Opacity at Full Load<br>(20% opacity @ exceptional conditions) |

**Combustion Turbine #12 -14 Emission Limits**

| <b>Pollutant</b>       | <b>Emission Limit<br/>(Natural Gas)</b>                        | <b>Emission Limit<br/>(No.2 Fuel Oil)</b> |
|------------------------|--|---|
| <b>SO<sub>2</sub></b>  | 1 grain/100 dscf   | 0.05% Sulfur Content, by weight           |
| <b>NO<sub>x</sub></b>  | 10 ppmvd - <i>9 ppm</i><br>(24-hour average) <i>Comp. test</i> | 42 ppmvd<br>(24-hour average)             |
| <b>VOC</b>             | 2.0 ppmvw as methane<br>(2.0 lb/hr/unit)                       | 4.0 ppmvw as methane<br>(5.0 lb/hr/unit)  |
| <b>Carbon Monoxide</b> | 20.0 ppmvd<br>(43.0 lb/hr/unit)                                | 20.0 ppmvd<br>(44.0 lb/hr/unit)           |
| <b>VE</b>              | 10% Opacity at Full Load                                       | 10% Opacity at Full Load                  |

**Notifications:**

**1) IMMEDIATELY NOTIFY ENVIRONMENTAL SERVICES FOR AN AGENCY NOTIFICATION IF...**

**P7 – P14:**

- A unit has **more than 4 hours in a 24 hour period** of NO<sub>x</sub> excess emissions due to startup, shutdown or malfunctions (excess emission notification)

**OR**

- A unit has **more than 2 hours in a 24 hour period** of NO<sub>x</sub> excess emissions due to just malfunctions (excess emission notification)

**OR**

- A unit's **daily 24-hour block average** of NO<sub>x</sub> emissions exceeds the permit limit (permit exceedance notification).

**P7 – P11:**

***NO<sub>x</sub> excess emission:***

Gas: hourly NO<sub>x</sub> average greater than 25 ppmvd corrected to 15% O<sub>2</sub>

Oil: hourly NO<sub>x</sub> average greater than 42 ppmvd corrected to 15% O<sub>2</sub>

***NO<sub>x</sub> permit exceedance:***

Gas: 24-hour block NO<sub>x</sub> average\* greater than 25 ppmvd corrected to 15% O<sub>2</sub>

Oil: 24-hour block NO<sub>x</sub> average\* greater than 42 ppmvd corrected to 15% O<sub>2</sub>

**P12 – P14:**

***NO<sub>x</sub> excess emission:***

Gas: hourly NO<sub>x</sub> average greater than 10 ppmvd corrected to 15% O<sub>2</sub>

Oil: hourly NO<sub>x</sub> average greater than 42 ppmvd corrected to 15% O<sub>2</sub>

***NO<sub>x</sub> permit exceedance:***

Gas: 24-hour block NO<sub>x</sub> average\* greater than 10 ppmvd corrected to 15% O<sub>2</sub>

Oil: 24-hour block NO<sub>x</sub> average\* greater than 42 ppmvd corrected to 15% O<sub>2</sub>

\* Calculated after excluding up to 4 hours of startup, shutdown and malfunction hours

**2) Notify the state agency at least 15 days prior to annual compliance testing.**